

ABSTRACT OF THE DISCLOSURE
METHOD AND SYSTEM FOR AUTOMATICALLY
DETECTING AND POWERING PC SPEAKERS

5 A method of powering an audio output device of a computer system, by
determining whether a passive or active audio output device is connected to an audio
output jack of the computer system and, based on this determination, providing an
appropriate power level to the audio output jack. For example, if the determination is
made that a passive audio output device is connected to the audio output jack, then a
10 3-watt power signal is applied to the audio output jack, but if the determination is
made that an active audio output device is connected to the audio output jack, then a
1/4-watt power signal is applied to the audio output jack. The type of audio output
device present may be determined by sensing an impedance at the audio output jack.
This sensing may be performed by comparing a load voltage associated with the
impedance to a reference voltage. The output of a switch device (multiplexer) having
a first input from an AC97 audio codec and headphone amplifier and a second input
from a passive speaker amplifier is selectively controlled by the sensing circuit.

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